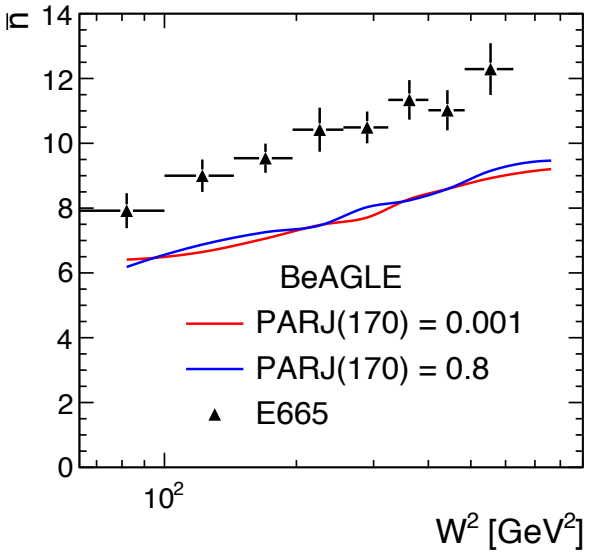
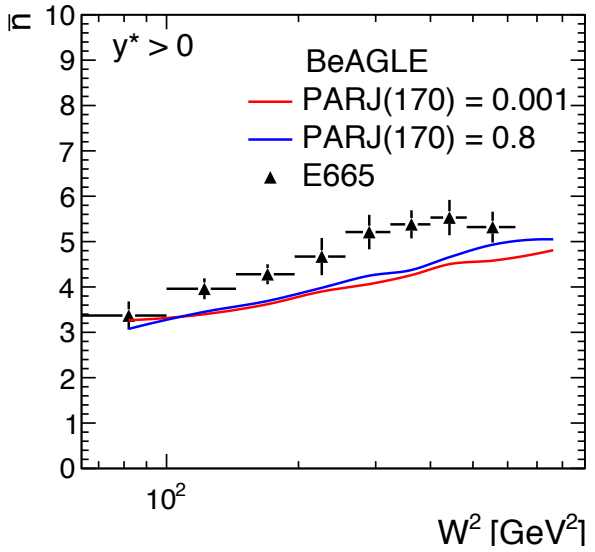
BeAGLE vs. E665

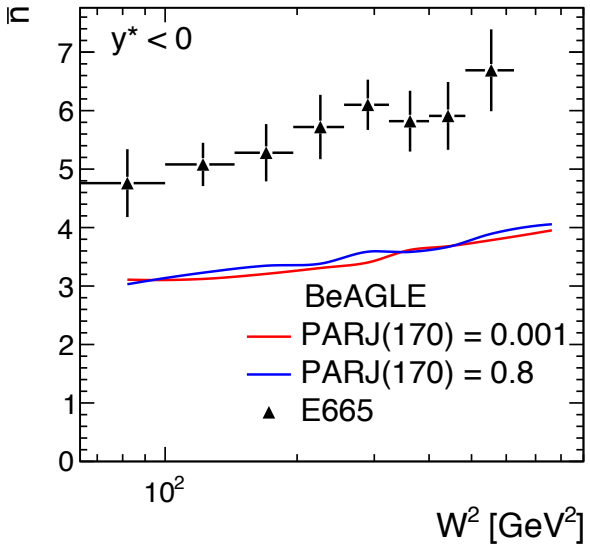
Wan Chang

2021.10.21

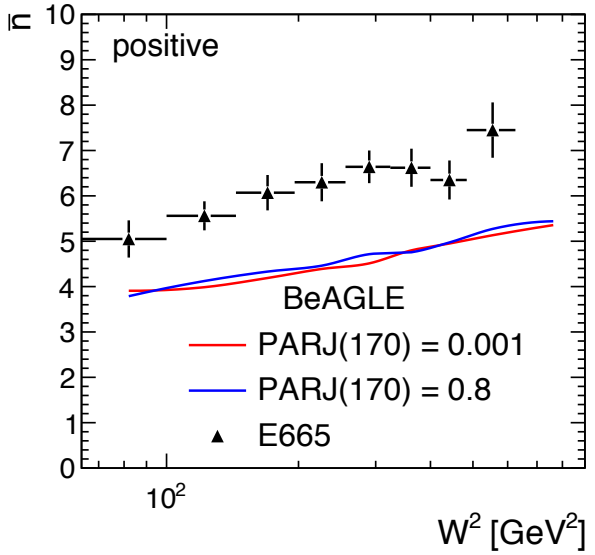
PARJ(170) = 0.001 vs. 0.8

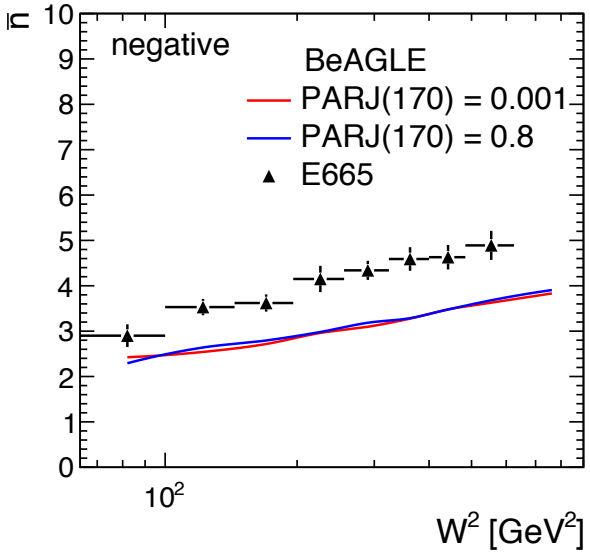




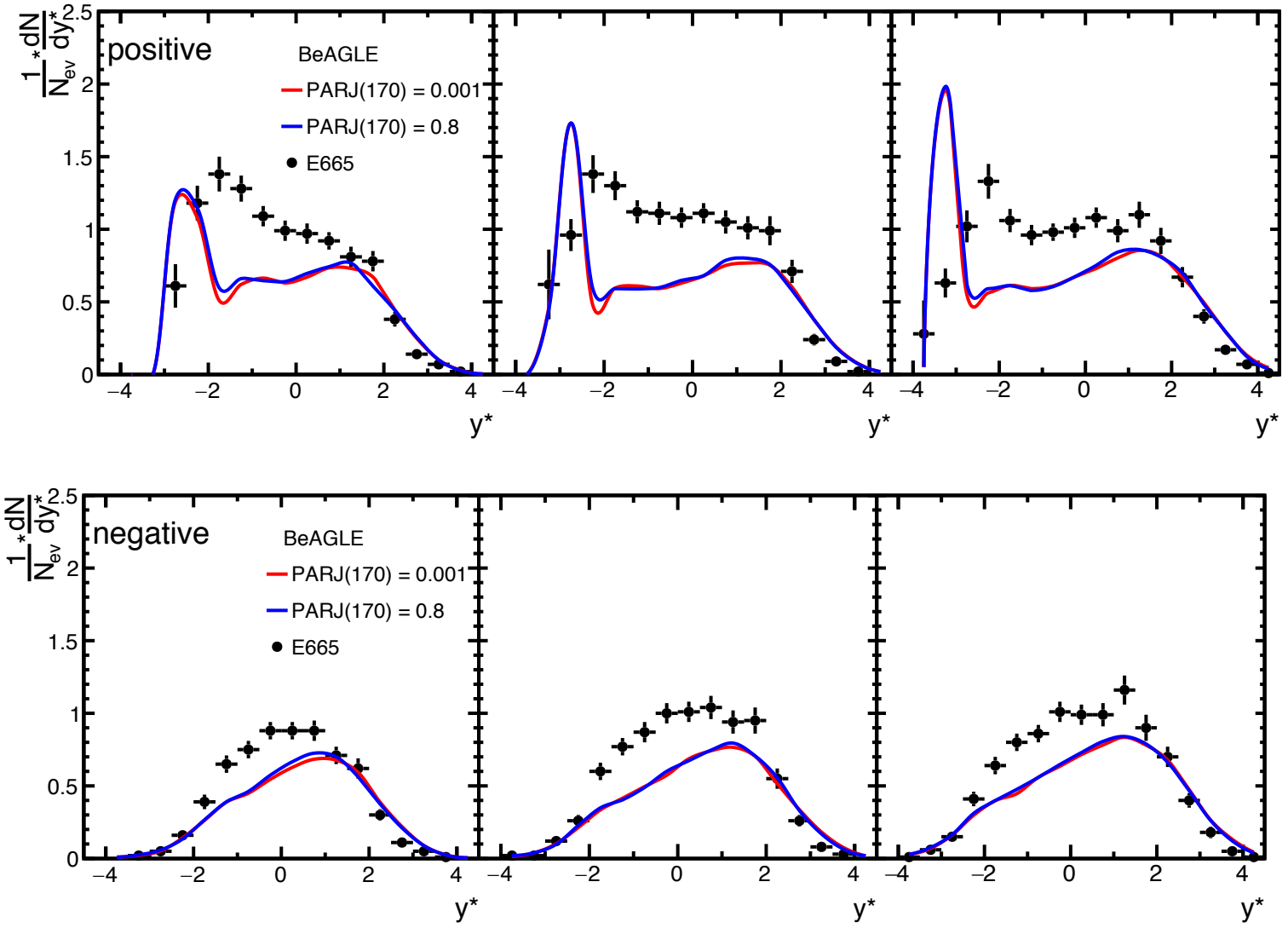


PARJ(170): a parameter for the recoil momentum. It separate the pt in fragmentation for the recoil from the one of normal hadrons.

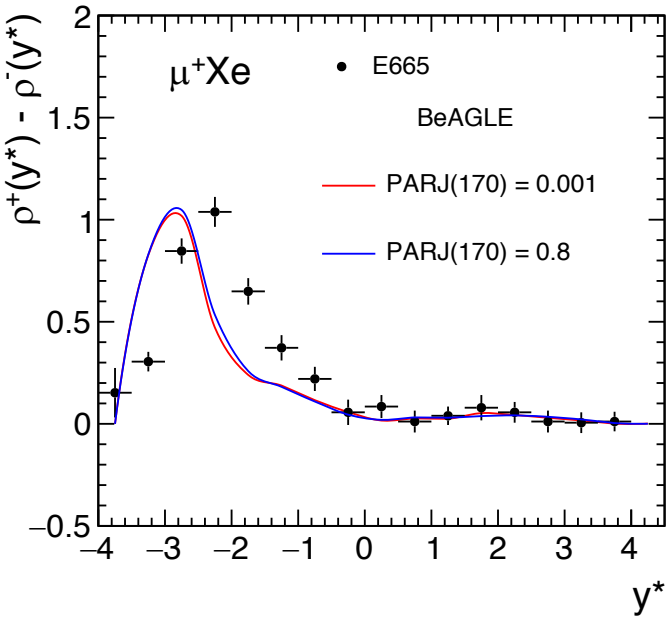




PARJ(170) = 0.001 vs. 0.8

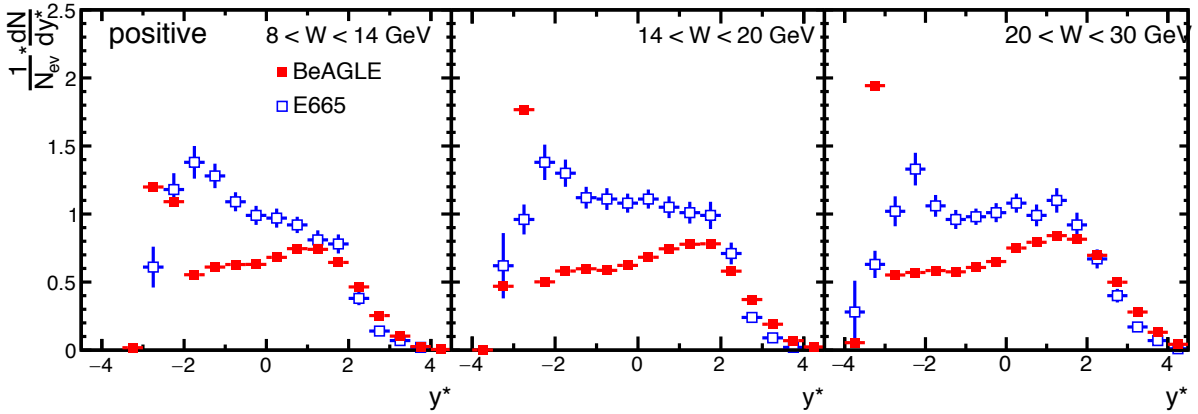


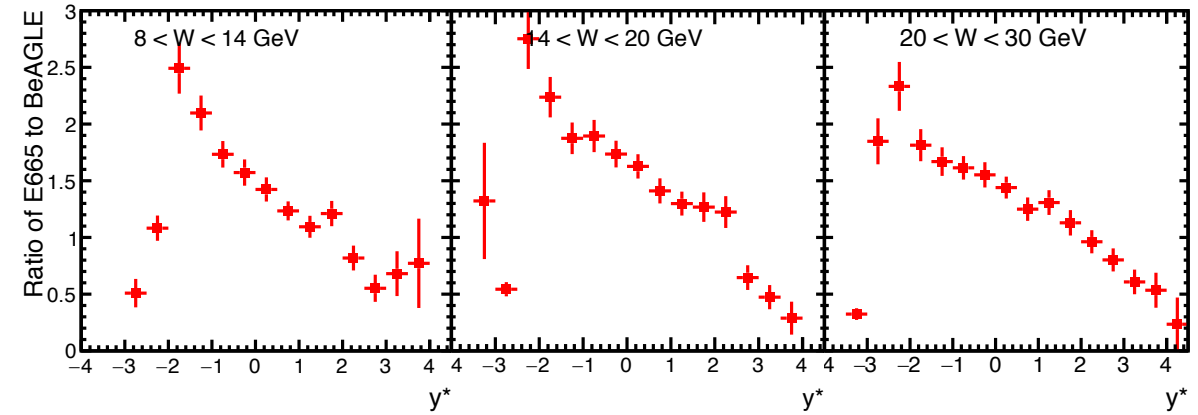
The normalized cms-rapidity distribution of hadronic net charge for muXe:

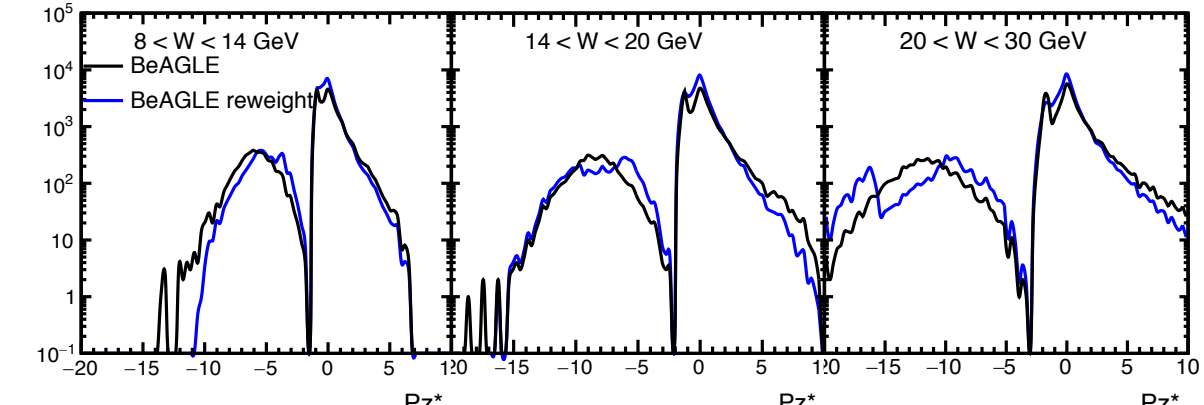


The results with 0.001 are almost same with 0.8.

BeAGLE reweight

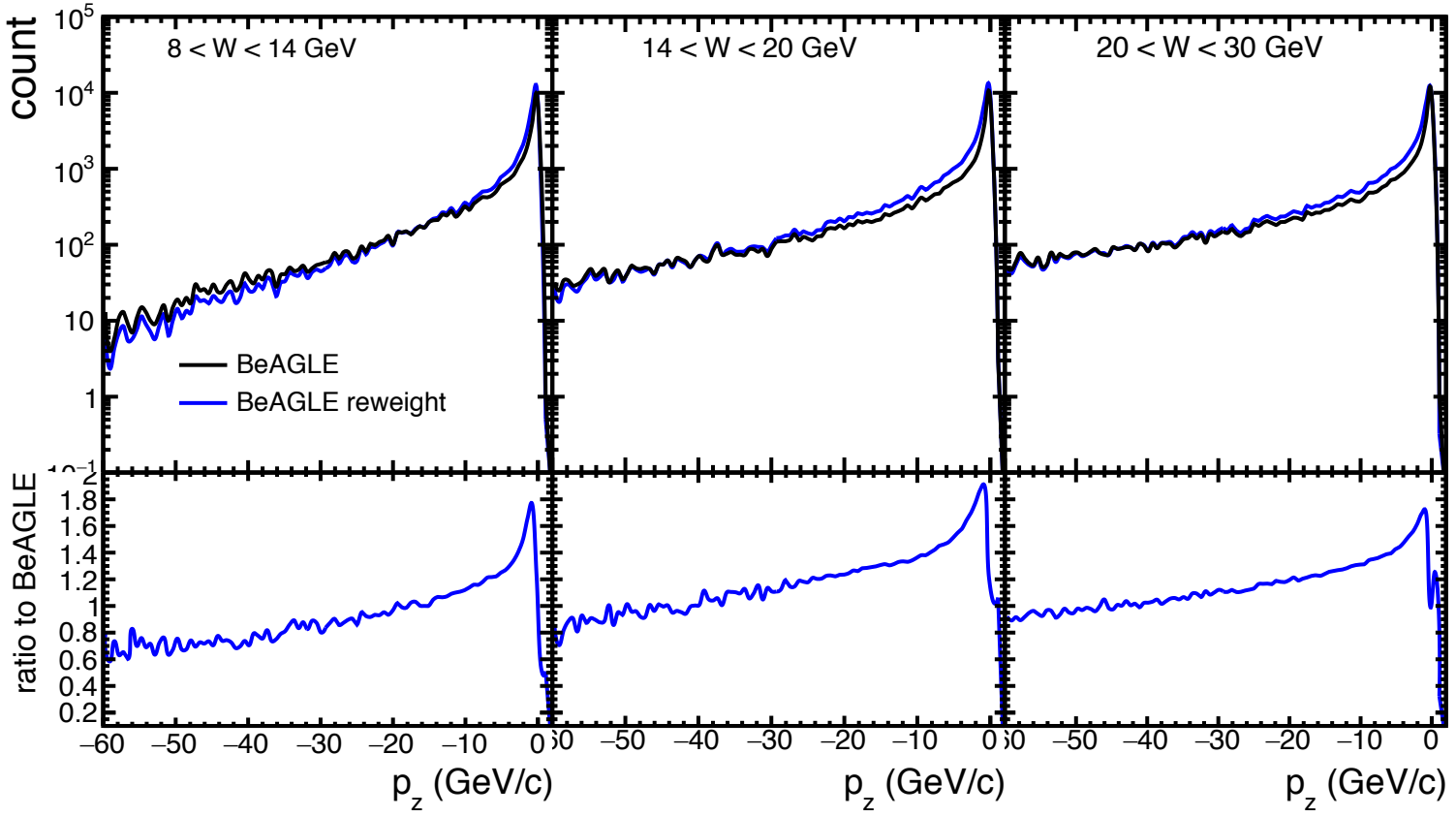






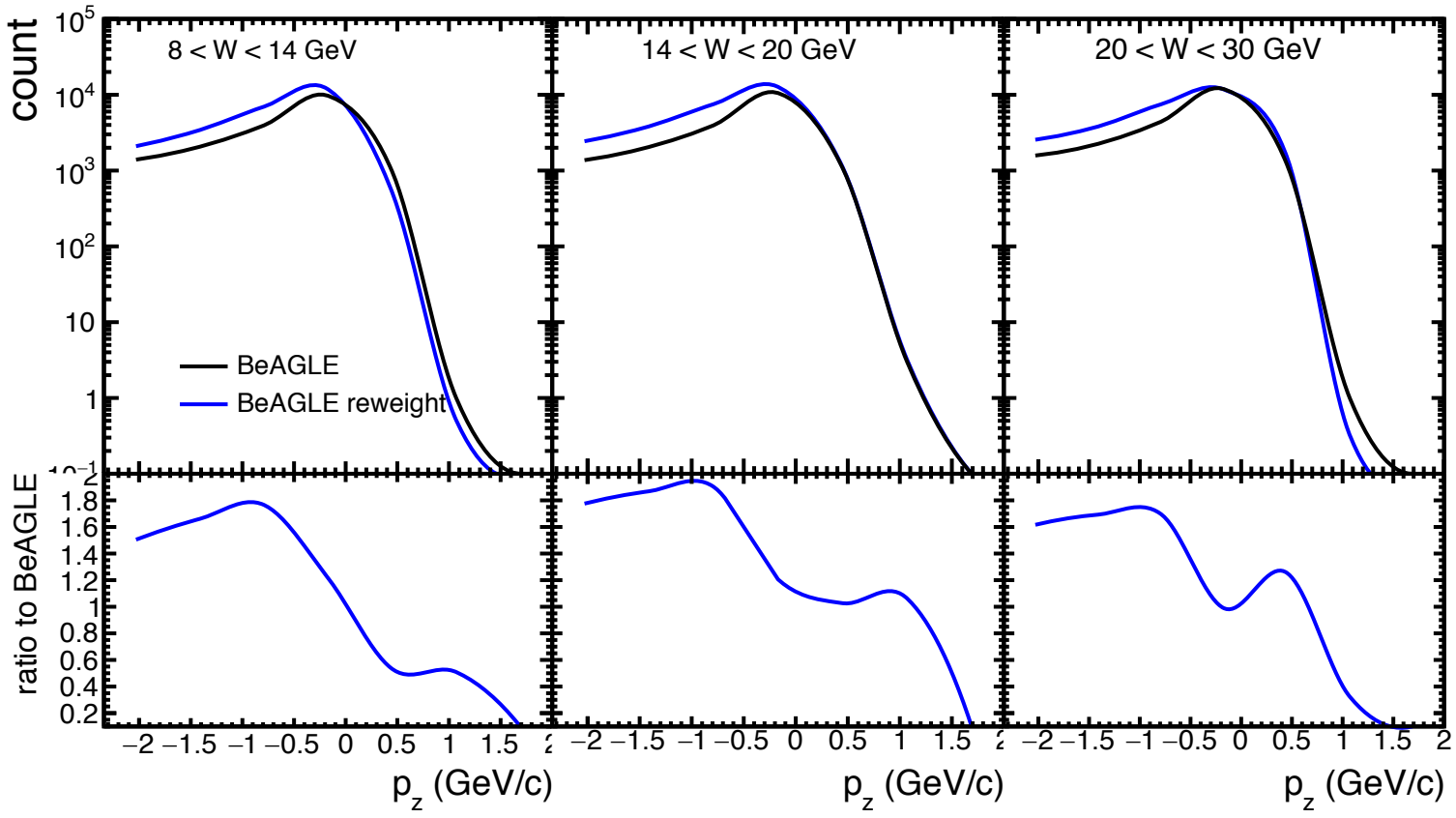
Reweight with the ratio of E665 to BeAGLE.

BeAGLE reweight

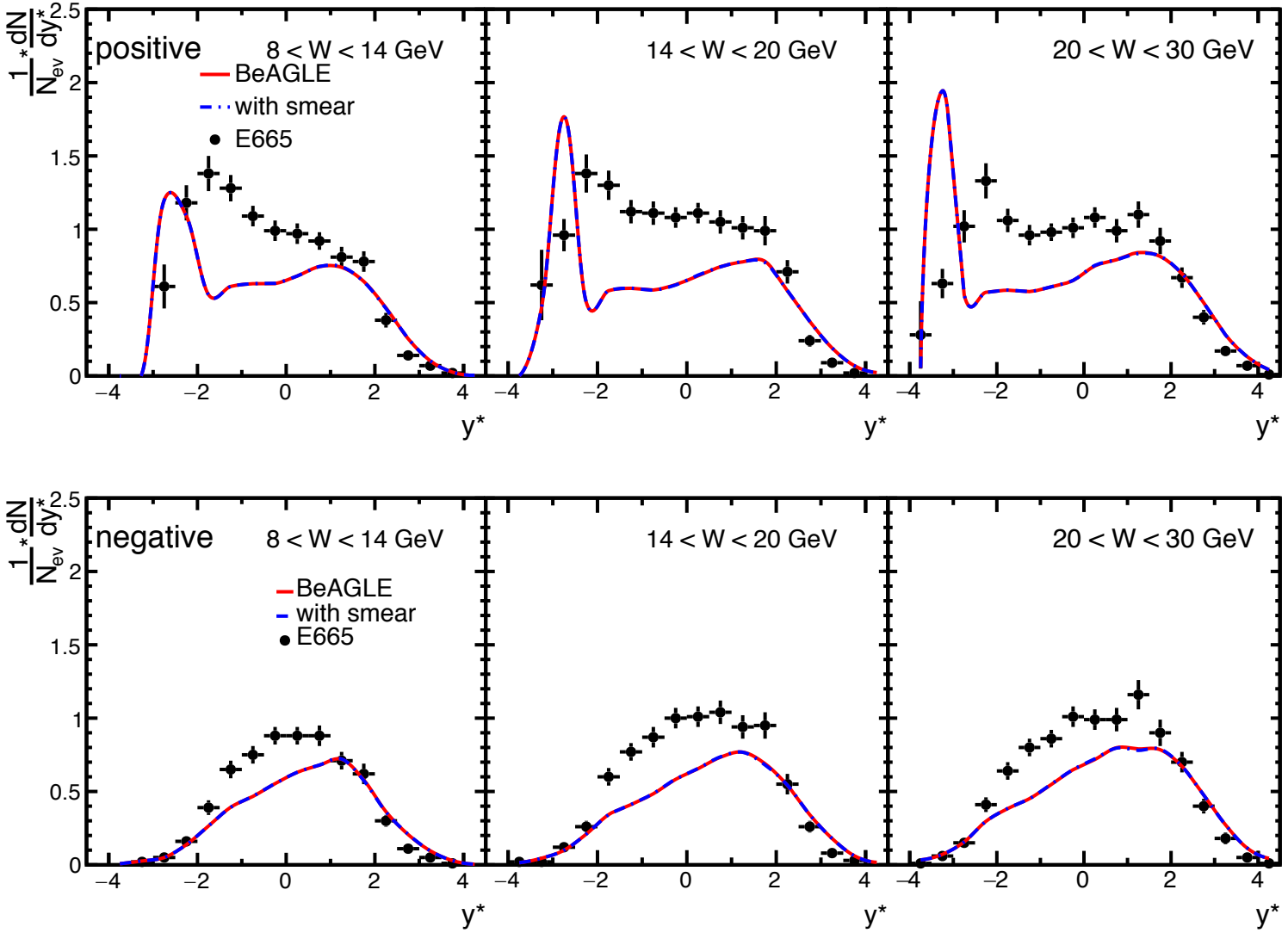


In BeAGLE, muon going direction is –pz direction.

BeAGLE reweight



Momentum smear



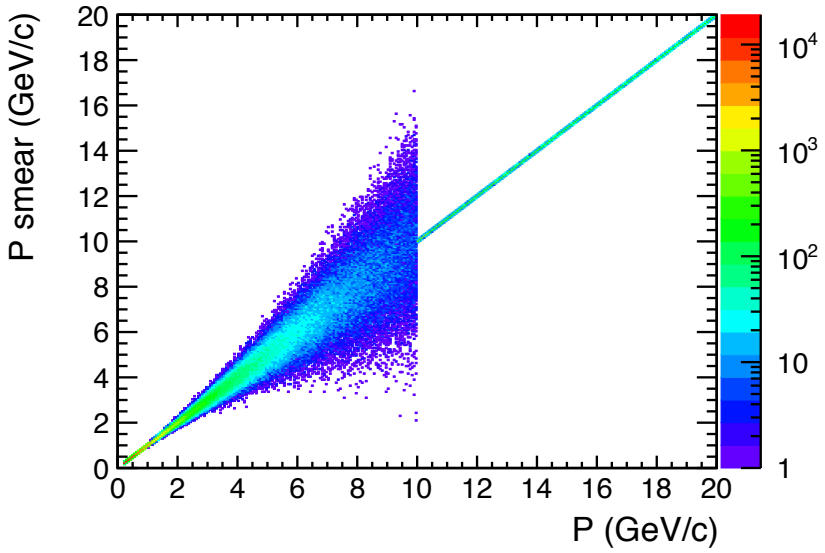
P: (0.2, 10) GeV

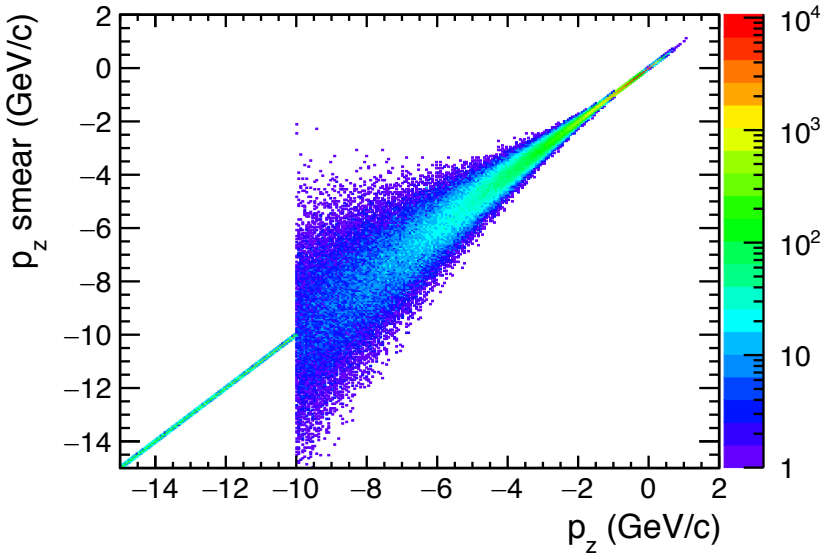
$$\frac{\Delta p}{p} = 0.02\, p/(GeV/c)$$

P: (10, 500) GeV

$$\frac{\Delta p}{p} = 5.\times 10^{-5} p/(GeV/c)$$

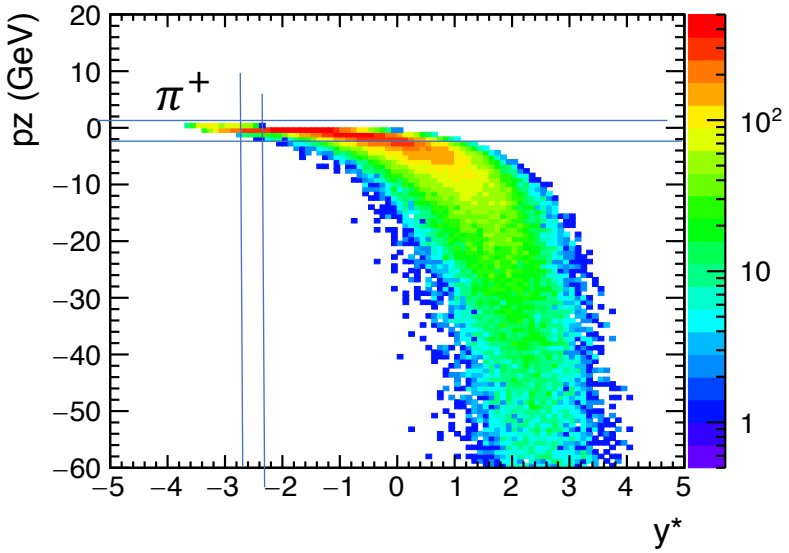
Momentum smear

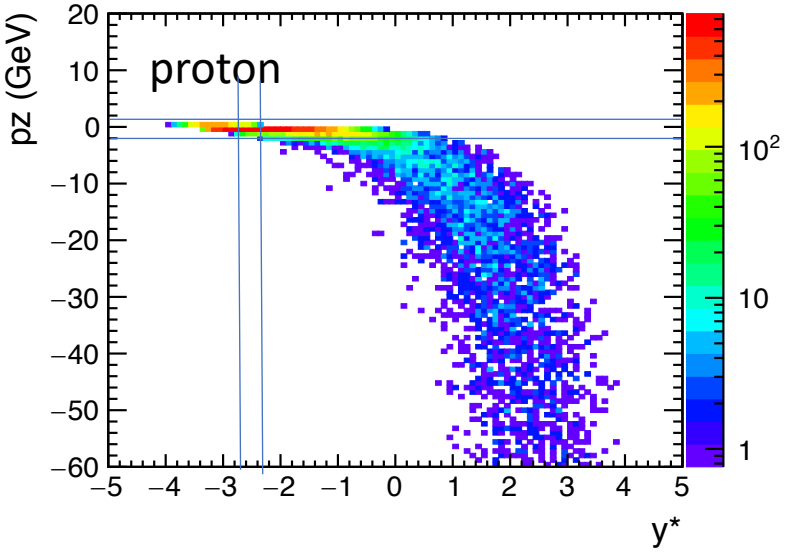


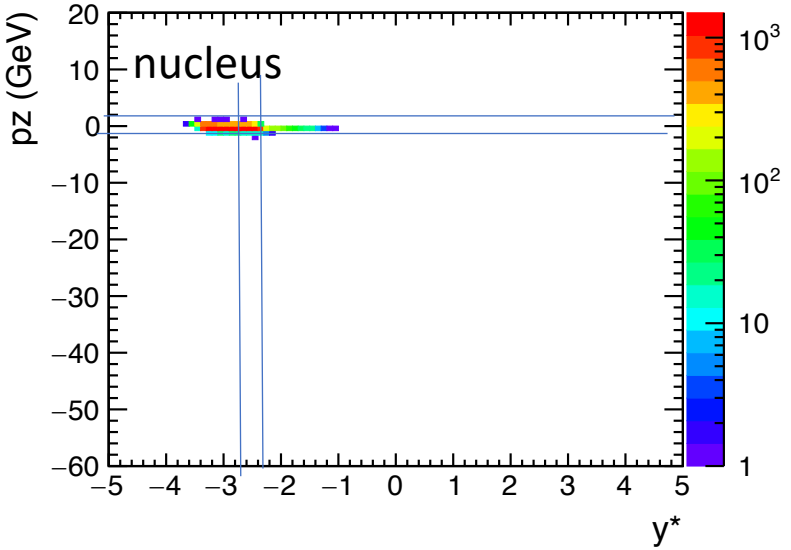


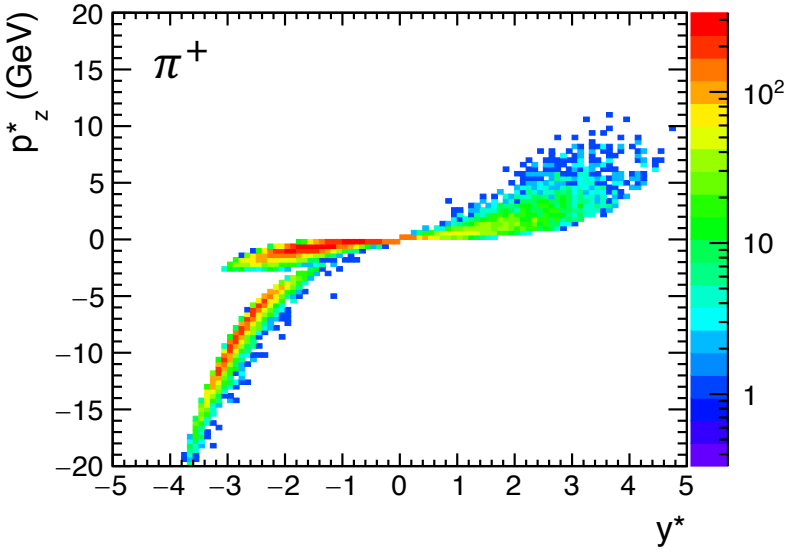
Backup

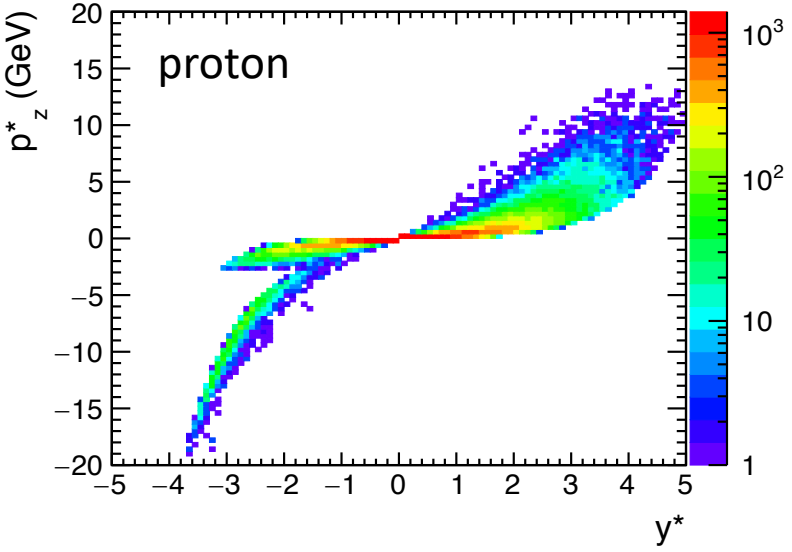
y* vs. pz(lab frame) y* vs. pz* (cms frame)

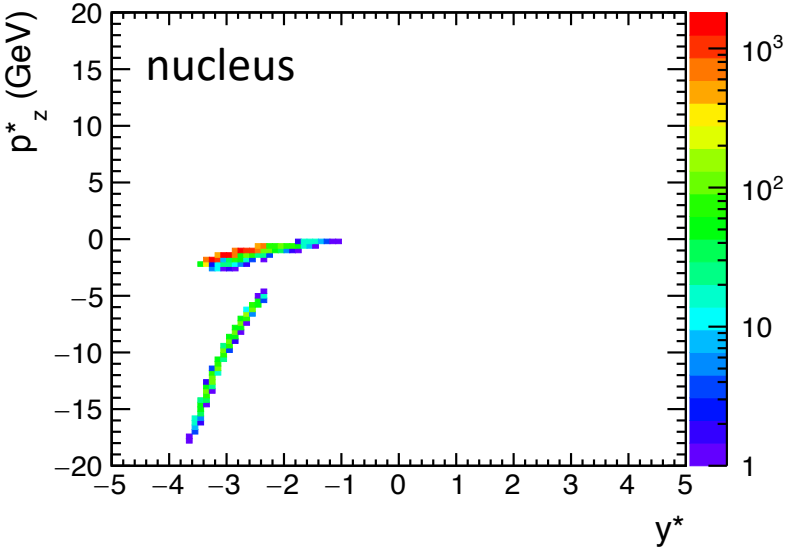




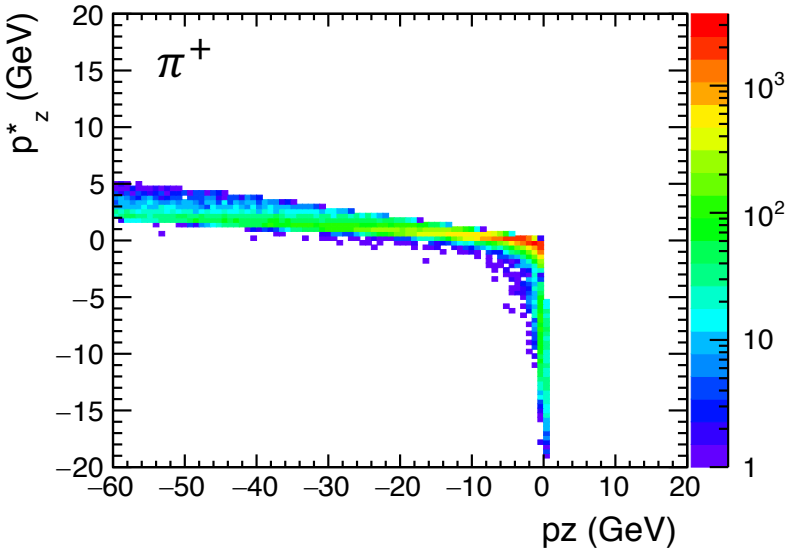


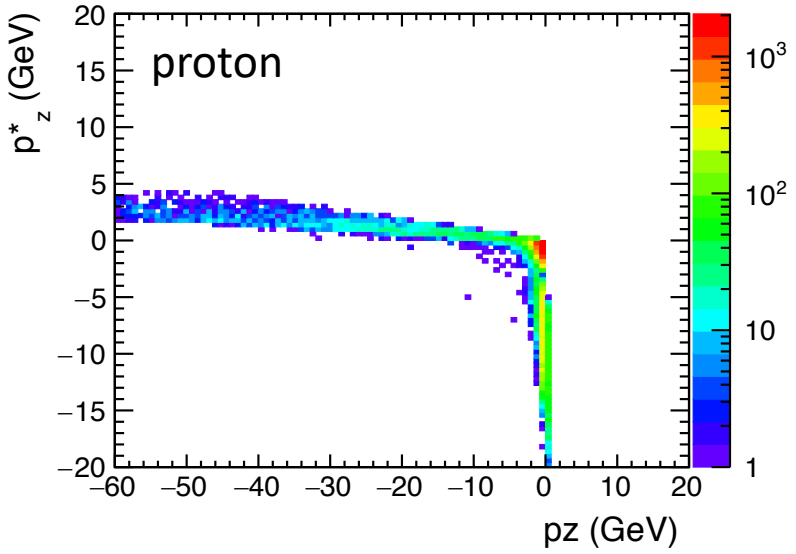


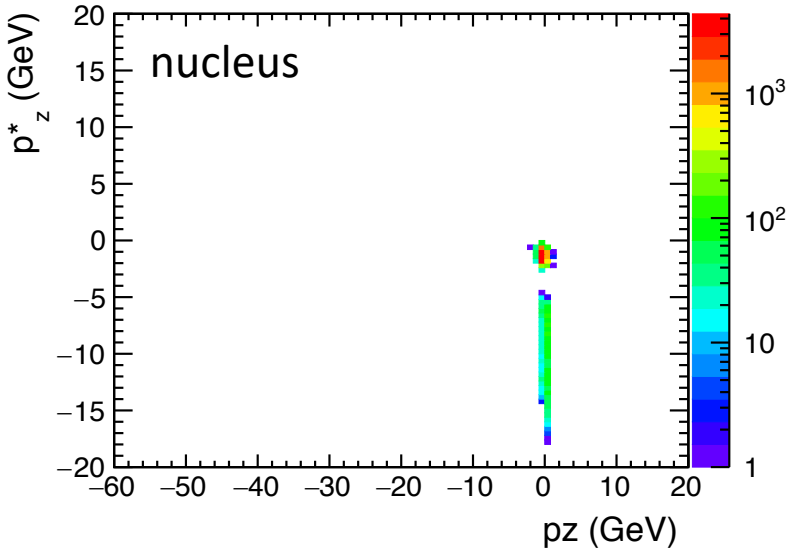




Pz* vs Pz







Y* vs. pz* vs. pz